

# Exhibit 3



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July 12, 2013

**VIA ELECTRONIC MAIL & U.S. MAIL**

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**Re: *Ithaca Ventures k.s. and Ithaca Development, LLC v. Nintendo of America Inc. and Nintendo Co., Ltd.*, U.S. Dist. Court for the Dist. of Delaware, CV 13-824 (GMS)**

Dear Mr. Sunshine and Mr. Dorsney:

We represent Nintendo of America Inc. and Nintendo Co., Ltd. in this matter.

As you should be aware, Nintendo's Wii Balance Board provides an unmoving, horizontal platform on which a user moves her body to interact with the Wii gaming system. The Balance Board detects changes in load through the use of load cells, which are connected at each of the four corners of the Balance Board. The Balance Board does not "tilt," "rotate about an axis" or move "parallel" to any such axis as required by the asserted patent. Accordingly, plaintiffs cannot have a good-faith basis for alleging infringement.

Ithaca Ventures k.s. and Ithaca Development, LLC ("Ithaca") have violated Fed. R. Civ. P. 11 by filing the Complaint. This letter provides you and your clients an opportunity to dismiss the Complaint. If Ithaca does not do so, Nintendo will seek sanctions against you and your clients under Fed. R. Civ. P. 11(c). The explanation below provides background information and describes the applicable law and technology. This discussion demonstrates that Ithaca should immediately withdraw its Complaint.

**I. BACKGROUND INFORMATION REGARDING IP NAV**

You are likely aware that your clients retained IP Navigation (or "IP Nav") to propose a licensing arrangement with Nintendo before filing this lawsuit. During Nintendo's discussions

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with IP Nav, Nintendo identified numerous radical differences between Nintendo's product and U.S. Patent No. 6,624,802 ("the '802 patent"). Those explanations demonstrated a lack of any reasonable ground for asserting infringement against Nintendo. We will not repeat details of those discussions here, but urge you to review them with your clients. Because Nintendo does not use the claimed invention, Nintendo had no reason to take a license.

## **II. RULE 11 SANCTIONS IN THE PATENT INFRINGEMENT CONTEXT**

In the Third Circuit, conduct violates Rule 11 if it is not "objectively reasonable under the circumstances." *Ario v. Underwriting Members of Syndicate 53 at Lloyds for 1998 Year of Account*, 618 F.3d 277, 297 (3d Cir. 2010) (internal quotation marks and citation omitted). In patent infringement actions, Rule 11 requires that an attorney interpret the patent claims before filing a complaint alleging infringement. *View Eng'g, Inc. v. Robotic Vision Sys., Inc.*, 208 F.3d 981, 986 (Fed. Cir. 2000) (affirming district court's sanction award where no reasonable pre-filing infringement analysis was undertaken). An attorney is not entitled to rely solely on the client's claim interpretation or the client's assertion of infringement. Instead, counsel must perform an independent analysis and interpretation of the patent's claim language. *Id.*; *S. Bravo Sys. Inc. v. Containment Techs. Corp.*, 96 F.3d 1372, 1375 (Fed. Cir. 1996). Counsel must also perform an independent assessment of whether the facts support an infringement allegation. *View Eng'g*, 208 F.3d at 986. An assertion of infringement cannot be supported in this case.

## **III. ITHACA'S ALLEGATIONS ARE BASELESS**

As outlined below, the claims of the '802 patent cannot read on the accused Balance Board. Hence, the infringement allegations are without merit and this case should be dismissed.

### **A. The '802 Patent Issued in a Crowded Field with Narrow Claims**

The '802 patent focuses on a device called the "Cybersurfer" that detects "states of movement of a body of a user" for use in computer games. The player stands on the Cybersurfer, which is intended to simulate the feeling of riding a wave on a surfboard or windsurfer, or of cruising a run on a snowboard. ('802 patent, col. 6:46-55) To achieve the actual feeling of engaging in a sport, the inventors emphasized movement of the support surface, and, in particular, at least three degrees of freedom of movement. As described in the abstract: "Process and device for producing input data for a data processing system in which a user stands, sits, kneels, etc. with his entire body on a support plate of a bearing device, such that this support plate is mounted on a base plate which *can tilt and/or turn and/or move in the vertical direction.*" (Abstract; emphasis added.)

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The inventors of the '802 patent were not the first to develop a videogame input device focused on movement and controlled by a user's legs. Indeed, the specification acknowledges that there were "[a] great many" such devices in the prior art. ('802 patent, col. 1:62) The inventors thus distinguished their invention from many prior art devices and, as a result, obtained narrow claims only after repeated Patent Office rejections, amendments and an appeal to the Board of Patent Appeals and Interferences.

**B. The '802 Patent Requires Tilt as Well as Rotation or Parallel Movement of a Support Surface**

The Ithaca Complaint cites Claim 1 of the '802 patent.<sup>1</sup> Claim 1 requires:

A device for detecting certain states of movement of a body of a user and for generating signals corresponding to a result of a detection for subsequent processing in a data processing system, comprising:

a bearing device for supporting the body of the user;

said bearing device further comprising a support unit mounted in a **tiltable** manner on a base part;

said support unit comprising a standing part;

said standing part having a support surface for supporting the body of the user; and

a sensor device for detecting a direction and a magnitude of a position of a projection of the body's center of gravity into the support surface relative to a predetermined original position in the support surface,

wherein the direction and the magnitude of the **tilt** of the support surface are detected for generating corresponding sensor signals,

wherein the support surface is mounted on the base part of said bearing device such that it can either **rotate about an axis or move in a direction which is parallel** to said axis, said axis being one of:

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<sup>1</sup> We therefore assume Ithaca's focus is on alleged infringement of Claim 1. None of the remaining claims of the '802 patent can reasonably be asserted against the Balance Board either. Each of the remaining independent claims (28, 70, 71, 72, 75, 76 and 77) requires, among other things, a rotatable support part, plate or surface which cannot reasonably be alleged to exist in the Balance Board, as discussed below.

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vertically oriented when the support surface is oriented horizontally,

perpendicular to at least the support surface,

running through at least the base part and the support surface when the support surface is not tilted,

running through at least the support surface and a tiltable mounting, or

running through at least the base part and a tiltable mounting,

wherein the sensor device detects either the direction and the magnitude of a rotational movement of the body of the user about the axis or detects at least the magnitude of a vertical movement of the body's center of gravity, and generates corresponding sensor signals.

### **C. Claim Construction**

Claim 1 includes limitations that the inventors said distinguished their invention from numerous prior art references. In particular, the inventors repeatedly emphasized during prosecution the importance of the "tiltability" of the support surface *along with* the ability of the support surface to either "rotate about an axis or move in a direction which is parallel to said axis." Providing for just one of the three movements was not enough because the prior art disclosed such movements.

#### **1. "Tilt" Limitation**

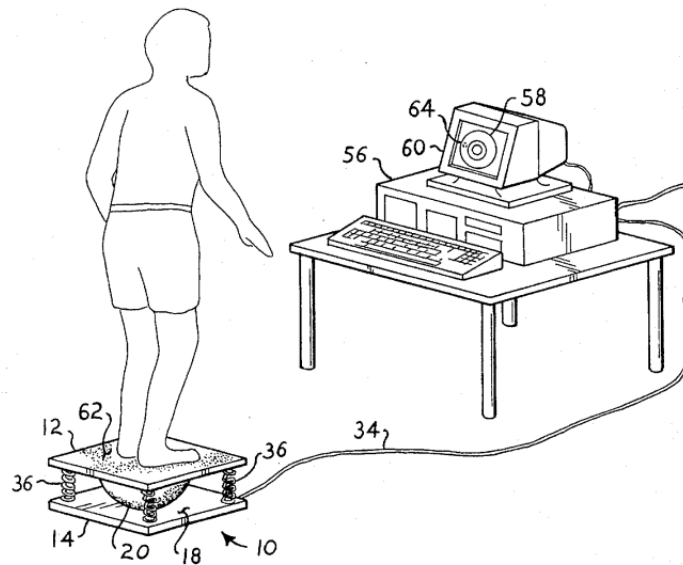
Claim 1 requires "a support unit mounted in a tiltable manner on a base part." It also requires detection of the "direction and magnitude of the tilt of the support surface." The inventors did not give "tilt" a special meaning in the specification of the '802 patent, so it should be construed as having its plain and ordinary meaning: "the state of being tilted; a sloping position."<sup>2</sup> The specification sheds further light on the amount of "tiltability" the inventors were focused on, discussing 10-15 degrees of tilt. ('802 patent, col. 4:6)

As the inventors admitted, inventions that provided for "tiltability" of a support surface, such as U.S. Patent No. 5,613,690 to McShane, were disclosed by the prior art. (*See, e.g.*, Response Under 37 C.F.R. 1.116 dated May 21, 2001 at p. 10.)

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<sup>2</sup>*Random House Webster's Unabridged Dictionary* 1983 (2d ed. 1998); *see also The American Heritage College Dictionary* 1417 (3d ed. 2000) (defining "tilt": "n. 1. The act of tilting or the condition of being tilted. 2.a. An inclination from the horizontal or vertical; a slant.").

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*Figure 1 of McShane Patent*

The inventors' discussion of "tilt" in relation to the McShane patent is consistent with its ordinary meaning: "In contrast to the invention, the platform 12 in McSHANE is merely angularly displaceably (i.e., tiltably) mounted to the base platform 14 via a convex support 20. Moreover, it is clear from these figures, that the convex support 20 merely allows the platform 12 to rock or angularly tilt relative to a horizontal plane (see col. 4, lines 9-14)." (*See*, Appeal Brief at p. 29.)

Further, the '802 inventors distinguished devices such as those disclosed in the figures of U.S. Patent No. 4,660,828 to Weiss, noting that the support surface "*does not move*, much less rotate, tilt and/or move up and down vertically." (Amendment Under C.F.R. 1.111 dated January 16, 2001 at p. 17; emphasis added.) The inventors also distinguished the device in figures 4 through 6 of U.S. Patent No. 5,283,555 to Ward as disclosing a "support surface 26a [that] is not tiltable." (Response Under C.F.R. 1.116 dated May 21, 2001 at p. 21.) "In contrast to the invention, the platform 26 in WARD is merely horizontally movable, not tiltable and rotatable or tiltable and movably [sic] up and down." *Id.*

Thus, the specification and prosecution history demonstrate that the "tilt" limitation is not merely conceptual, but requires real motion and, at a minimum, a support surface that can be angularly displaced or sloped. An unmoving, horizontal surface is not within this limitation, nor is a surface that moves horizontally.

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## 2. “Rotation” or “Parallel Movement” Limitation

Claim 1 also requires a support surface that is mounted on the base of the bearing device such that it can “either rotate about an axis or move in a direction which is parallel to said axis.” Again, the inventors did not give “rotate” a special meaning in the specification, so it should be construed as having its plain and ordinary meaning: “to cause to turn around an axis or center point; revolve.”<sup>3</sup> Likewise, “parallel” is given no special meaning in the specification and should be construed as having its plain and ordinary meaning: “extending in the same direction, equidistant at all points, and never converging or diverging.”<sup>4</sup>

During prosecution, the inventors emphasized this limitation to distinguish prior art devices. For example, they distinguished U.S. Patent No. 5,860,861 to Lipps noting: “It is clear from the figures 3-6 in LIPPS that the support platform 26 cannot rotate with respect to any defined axis, and the Examiner has failed to identify any such axis. It is also equally clear that the platform 26 cannot move up and down with respect to any defined axis, and, again, the Examiner has failed to identify any such axis.” (Response Under 37 C.F.R. 1.116, dated May 21, 2001 at p. 5.) The inventors also noted that “the fact that the platform 26 [in Lipps] is not centrally mounted and is instead mounted longitudinally at two end points, i.e., 31 and 32, clearly means that the platform is not designed to rotate.” (*See*, Appeal Brief at p. 19.) Likewise, the McShane ’690 patent can tilt but “cannot also be said to rotate with respect to any defined axis, i.e., springs 36 would prevent such rotation.” (Response Under 37 C.F.R. 1.116 dated May 21, 2001 at p. 10.)

Regarding parallel movement, the inventors explained that this is an “up and down” movement. The prosecution history shows the up and down is equal across the surface (and thus is distinguishable from the “tilt” limitation). For example:

It is also true that the platform 26 [of Lipps] cannot move parallel to the axis C. It is discernible from Fig. 3 that end 50 of the platform 26 is movable downwards, i.e., against the biasing force of the spring 62. However, the same cannot be said of end 52 because rubber bushings 72 prevent the downward movement of this end. *Accordingly, it is obvious that the downward movement of only one end, i.e., end 50, would only constitute a tilting movement, rather than a movement that is parallel to the axis C.* In other words, the tilting movement shown in LIPPS is a non-parallel movement of only one end of the platform 26. On the other hand,

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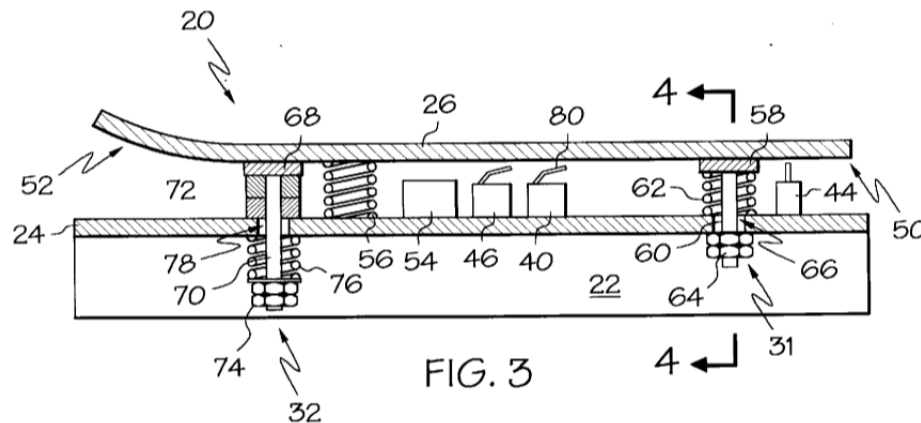
<sup>3</sup> *Random House Webster’s Unabridged Dictionary*, *supra* note 2, at 1673; *see also The American Heritage College Dictionary*, *supra* note 2, at 1187 (defining “rotate”: “To turn around on an axis or center”).

<sup>4</sup> *Random House Webster’s Unabridged Dictionary*, *supra* note 2, at 1407 (2d ed. 1998); *see also The American Heritage College Dictionary*, *supra* note 2, at 990 (defining “parallel”: “Being an equal distance apart everywhere”).

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*claim 1 requires a movement of the entire platform 26 downward or upward, a movement which would be parallel to axis C.*

(Appeal Brief at 19; emphasis added.)



*Figure 3 of Lipps Patent*

In distinguishing McShane, the inventors also emphasized that the “tilt” limitation was different from the parallel movement limitation:

Specifically, Applicants stress that it is apparently true that the platform 12 in McSHANE can pivot to either side about the convex support 20. However, even such pivoting movement cannot be said to also constitute rotation of the platform 12 with respect to a defined axis, and Applicants submit that the Examiner has failed to identify any such axis. Moreover, such movement clearly cannot also be said to constitute up and down movement of the platform 12 with respect to a defined axis, and again, the Examiner has failed to identify any such axis.

(Response Under 37 C.F.R. 1.116 dated May 21, 2001 at p. 10-11.)

Thus, the specification and prosecution history show that the “rotation” and “parallel movement” limitation requires, at a minimum, a support surface that can either turn around an axis or move as a whole straight upward or downward, parallel to such axis.



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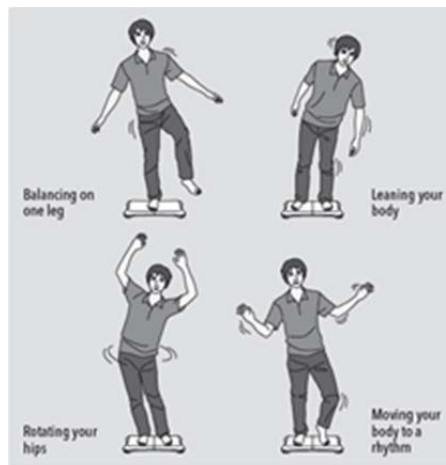
**D. The Balance Board Cannot Satisfy the “Tilt” and “Rotation” or “Parallel Movement” Limitations**

Unlike the Cybersurfer, the Balance Board provides an unmoving, horizontal surface for the user to stand on.



*The Nintendo Wii Balance Board*

The user of the Balance Board moves her body to simulate various activities, examples of which are shown below:



The Balance Board contains weight sensors, called “S-shaped load cells,” securely attached in each of the four legs of the board. As the user moves on the Balance Board, the load cells detect weight or “load” on the particular leg using strain gauges, which are well-known and are visibly attached to the outside of the load cells. As is also well known, a strain gauge is a sensor that generates an electrical signal corresponding to the strain (or microscopic bending) of an object. That bending is too small to be visible.

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*Nintendo Load Cell*

The S-shaped load cells are attached in each corner to the plastic housing, and do not allow for “tilt.” The microscopic bending of the load cells is not a “tilt” within the meaning of Claim 1, and no reasonable argument can be made to the contrary. Nor can the securely attached, level Balance Board surface reasonably be alleged to be “mounted in a tiltable manner” within the meaning of Claim 1.

The claim also requires that the support surface be “mounted on the base part of said bearing device such that it can either *rotate about an axis* or *move in a direction which is parallel to said axis*.” The Balance Board surface, which is securely mounted in all four corners, cannot reasonably be said to “rotate about an axis” within the meaning of the claim. Indeed, in light of the prosecution history arguing that the longitudinally mounted platform in Lipps “clearly” is not designed to rotate (Appeal Brief p. 19), any such assertion of rotation by the Balance Board is preposterous.

Likewise, the Balance Board surface cannot reasonably be said to move in a direction parallel to said axis. Again, the Balance Board surface is securely mounted in all four corners. The user does the moving, not the Balance Board.

#### **IV. CONCLUSION**

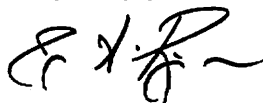
Many other claim limitations are missing in the Balance Board; the above examples are merely illustrative of some of the most obvious differences, demonstrating that this case has been filed in violation of Fed. R. Civ. P. 11.

Pursuant to Rule 11, Ithaca has this opportunity to “walk away” and dismiss its claims against Nintendo. If Ithaca does not dismiss this lawsuit on or before July 29, 2013, Nintendo will pursue a motion seeking sanctions, including dismissal and an award of all Nintendo’s costs and fees.

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Thank you for your prompt attention to this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. A. Riedinger", with a stylized flourish at the end.

Jerry A. Riedinger

JAR:lad

cc: Ted S. Ward (via email & U.S. Mail)  
Kim S. Zeldin (via email & U.S. Mail)  
Edward A. Klein (via email & U.S. Mail)

# Exhibit 4



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August 6, 2013

**VIA ELECTRONIC MAIL & U.S. MAIL**

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**Re: *Ithaca Ventures k.s. and Ithaca Development, LLC v. Nintendo of America Inc. and Nintendo Co., Ltd.*, U.S. Dist. Court for the Dist. of Delaware, CV 13-824 (GMS)**

Dear Mr. Ward:

Thank you for your August 1st letter, responding to my July 12th explanation of the severe problems with Ithaca's infringement claims. While we appreciate your effort to explain Ithaca's position, your letter fails to demonstrate that you and your clients conducted a reasonable pre-suit investigation and analysis as required by Fed. R. Civ. P. 11. Instead, it demonstrates that Ithaca and its attorneys were well-aware of facts showing that Nintendo's Balance Board cannot infringe the Ithaca patent.

Nintendo is aware of the amount of bending occurring in the Balance Board load cells. That bending is microscopic – it is on the order of 50-100 microns, even when all of the load is placed on one corner of the board (something that does not happen in normal game play). Such bending is, at most, the same as the width of a human hair, and cannot in any reasonable analysis be considered to be a tilt. The diagram on page four of your letter shows that Ithaca is aware of that fact. Although you failed to describe the units of measurement in your letter, those units must be microns, showing Ithaca knows the total bending is imperceptible. No reasonable assertion of tilting can be made based on that microscopic bending, especially not in the context of the devices described and the claims in Ithaca's patent. Rule 11 obligations are not satisfied when claims are stretched beyond reason. *See, e.g., Eon-Net LP v. Flagstar Bancorp*, 653 F.3d

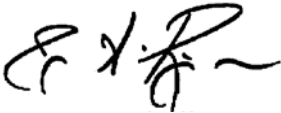
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1314 (Fed. Cir. 2011) (upholding the district court's imposition of sanctions against plaintiff for filing an objectively baseless infringement suit because its pre-suit investigation compared the accused products to an unreasonably broad construction of a necessary claim term).

Nintendo appreciates the severity of Rule 11 sanctions and does not take this issue lightly. That is the reason Nintendo gave your clients an opportunity to walk away. That opportunity still exists. We will be happy to discuss how Ithaca can take advantage of our offer.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. A. Riedinger", with a stylized flourish at the end.

Jerry A. Riedinger

JAR:kel

cc: Randall J. Sunshine (via email & U.S. Mail)  
Kim S. Zeldin (via email & U.S. Mail)  
Edward A. Klein (via email & U.S. Mail)  
Kenneth L. Dorsey (via email & U.S. Mail)

# Exhibit 5

## NewsRoom

6/5/13 N.Y. Times A25  
2013 WLNR 13756999

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June 5, 2013

Section: A

Make Patent Trolls Pay in Court

RANDALL R. RADER, COLLEEN V. CHIEN and DAVID HRICIK

Randall R. Rader is chief judge of the United States Court of Appeals for the Federal Circuit. Colleen V. Chien is an assistant professor of law at Santa Clara University. David Hricik is a professor of law at Mercer University.

FROM an early age we are taught the importance of fighting fairly. But as the vast number of frivolous patent lawsuits have shown, too many people are rewarded for doing just the opposite.

The onslaught of litigation brought by "patent trolls" -- who typically buy up a slew of patents, then sue anyone and everyone who might be using or selling the claimed inventions -- has slowed the development of new products, increased costs for businesses and consumers, and clogged our judicial system.

Their business plan is simple: trolls (intellectual-property lawyers use less evocative terms like "non-practicing entities" and "patent-assertion entities") make money by threatening companies with expensive lawsuits and then using that cudgel, rather than the merits of a case, to extract a financial settlement. In the apt summary of President Obama, who on Tuesday announced a plan to stave off frivolous patent litigation, trolls just want to "hijack somebody else's idea and see if they can extort some money."

So far, legislative action against the practice has been meager. In May, Gov. Peter Shumlin, Democrat of Vermont, signed legislation -- the first of its kind -- that amends the state's consumer protection laws to empower its attorney general and others to sue patent holders who assert infringement claims against a Vermont business or resident in bad faith. But lawmakers in the remaining 49 states and in Congress, where no less than four bills now sit in various committees, have yet to legislate specifically against patent trolling.

Mr. Obama's latest proposals echo those in several bills, including making it harder for patent litigants to set up shell companies to hide their activities.

In the meantime, vexatious patent litigation continues to grind through our already crowded courts, costing defendants and taxpayers tens of billions of dollars each year and delaying justice for those who legitimately need a fair hearing of their claims. Trolls, in fact, filed the majority of the roughly 4,700 patent suits in 2012 -- and many of those were against small companies and start-ups that often can't afford to fight back.



The problem stems largely from the fact that, in our judicial system, trolls have an important strategic advantage over their adversaries: they don't make anything. So in a patent lawsuit, they have far fewer documents to produce, fewer witnesses and a much smaller legal bill than a company that does make and sell something.

Because they don't manufacture products, they need not fear a counterclaim for infringing some other patent. They need not be concerned with reputation in the marketplace or with their employees being distracted from business, since litigation is their business.

Trolls, moreover, often use lawyers to represent them on a contingent-fee basis (lawyers get paid only when they win), allowing trolls to defer significant legal costs that manufacturers, who generally must pay high hourly fees, cannot.

With huge advantages in cost and risk, trolls can afford to file patent-infringement lawsuits that have just a slim chance of success. When they lose a case, after all, they are typically out little more than their own court-filing fees. Defendants, on the other hand, have much more to lose from a protracted legal fight and so they often end up settling.

Lost in the debate, however, is that judges already have the authority to curtail these practices: they can make trolls pay for abusive litigation.

Section 285 of the Patent Act, as well as Rule 11 of the Federal Rules of Civil Procedure, give judges the authority they need to shift the cost burden of litigation abuse from the defendant to the troll. But remarkably, judges don't do so very often: by our count, fees were shifted under Section 285 in only 20 out of nearly 3,000 patent cases filed in 2011.

Our judicial system's bias against shifting fees partly explains that reluctance, but Section 285 is flexible enough to help defend against trolls. And even though many cases settle, the prospect of paying fees will discourage aggressive suits and frivolous demands.

To make sure Section 285 is implemented with appropriate vigor, judges must look more closely for signs that a patent lawsuit was pursued primarily to take improper advantage of a defendant -- that is, using the threat of litigation cost, rather than the merits of a claim, to bully a defendant into settling.

One sign of potential abuse is when a single patent holder sues hundreds or thousands of users of a technology (who know little about the patent) rather than those who make it -- or when a patent holder sues a slew of companies with a demand for a quick settlement at a fraction of the cost of defense, or refuses to stop pursuing settlements from product users even after a court has ruled against the patentee.

Other indications of potential bullying include litigants who assert a patent claim when the rights to it have already been granted through license, or distort a patent claim far beyond its plain meaning and precedent for the apparent purpose of raising the legal costs of the defense.

Judges know the routine all too well, and the law gives them the authority to stop it. We urge them to do so.

DRAWING (DRAWING BY O.O.P.S.)

---- Index References ----

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End of Document

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**NewsRoom**

# Exhibit 6



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August 1, 2013

VIA E-MAIL JRIEDINGER@PERKINSCOIE.COM AND U.S. MAIL

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Re: *Ithaca Ventures k.s. and Ithaca Development, LLC v. Nintendo of America Inc. and Nintendo Co., Ltd.*, U.S. District Court for the District of Delaware, CV 13-824 (GMS)

Dear Mr. Riedinger:

I am writing in response to your letter dated July 12, 2013, in the above-referenced matter. Your threat to file a Rule 11 motion is meritless and it will not cause our clients to relinquish their rights or forfeit the damages to which they are entitled. Your letter is, at worst, an improper attempt at intimidation and, at best, a claim construction argument, which does not support a Rule 11 argument. *Woods v. Deangelo Marine Exhaust, Inc.*, 692 F.3d 1272, 1288 (Fed. Cir. 2012); *Hoffman-LaRoche Inc. v. Invamed, Inc.*, 213 F.3d 1359, 1362 (Fed. Cir. 2000); *View Engineering, Inc. v. Robotic Vision Sys., Inc.*, 208 F.3d 981 (Fed. Cir. 2000).

As your clients are aware, Plaintiffs have conducted their due diligence review of Nintendo's infringing product and shared findings with Nintendo of America, Inc. and Nintendo Corp. Ltd. (collectively "Nintendo") prior to initiating the litigation. Nintendo received a 21 page Power Point presentation on July 9, 2012 where Ithaca's position was clearly laid out and Nintendo was given an opportunity to respond. Over the next nine (9) months, Ithaca continued to attempt to engage with Nintendo and ultimately Plaintiff filed suit on May 9, 2013. Unlike the case you attempt to characterize in your letter, there obviously was extensive presuit investigation that was actually provided to Nintendo. If you have not received copies of those documents, which were sent pursuant to settlement discussions under FRE Rule 408, let me know and I will provide those to you.

In like manner, I ask that you provide me with the evidence you believe Nintendo previously shared with Plaintiffs regarding "numerous radical differences" between Nintendo's Balance Board and the patent in suit, U.S. Patent No. 6,624,802 (the "patent in suit" or the "802 patent").<sup>1</sup> The statement is made in your

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<sup>1</sup> I note that some of your analysis deviates from a comparison of the patent in suit to the accused infringing Balance Board, and instead seems to focus on a product sold by Plaintiff Ithaca Ventures k.s.

Jerry A. Riedinger

**August 1, 2013**

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letter, but it is unclear to us what are the “numerous radical differences” you are specifically referencing. Below we address the likely construction of the “tilt” and “rotation/parallel movement” terms and provide you with information on how these limitations are being met by the Balance Board (including testing data). If there are other “radical” differences, please provide us with a letter detailing these differences and we will address them.

### **ITHACA'S ALLEGATIONS ARE WELL FOUNDED AND BASED ON SUBSTANTIAL EVIDENCE**

Contrary to your assertions and as Nintendo knows having been provided substantial written and oral presentations prior to the initiation of litigation, Plaintiffs have conducted a thorough investigation of Nintendo's infringement prior to filing the complaint in this matter. Plaintiffs' investigation was reasonable and exceeded its pre-filing obligations. In fact, the investigation, which was shared in significant part with Nintendo prior to filing, confirmed Nintendo's infringement. Discussions with Nintendo also revealed the claims construction position that Nintendo would assert in defense of the infringement analysis.

Below is a brief summary of the analysis as well as the evidence disputing assertions made in your letter regarding the two limitations of claim 1 you chose to highlight.

Nintendo's Balance Board is a device for detecting certain states of movement of a body of a user, and for generating signals corresponding to those detections for subsequent processing in a data processing system (e.g., the Nintendo Wii). The Balance Board includes each and every limitation enumerated in Claim 1 of the '802 patent, including tilting and moving in a direction parallel to a vertically oriented axis.

#### **1. “Tilt” Limitation**

Nintendo notes that the inventors did not define “tilt” in the specification of the '802 patent, and correctly recites the definition of “tilt”: “the state of being tilted; a sloping position.” Furthermore, the specification of the '802 patent does not limit the definition of “tilt” by requiring any particular magnitude of tilting; it does, however, suggest that the angle of tilt should be limited to “a relatively small value,” and provides the range of 10-15 degrees as an example. ('802 patent, col. 4:5-6). This is so that the user can more easily maintain balance. The purpose of “tilting,” according to the '802 patent, is to provide a mechanism by which the position of the projection of a user's center of gravity can be detected. The claimed device performs this detection using sensors: “[T]he direction and the magnitude of the tilt of the support surface are detected for generating corresponding sensor signals....” ('802 patent, claim 1). The magnitude of the tilt is incidental.

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known as the “Cybersurfer.” Given the lack of relevance of that discussion, I instead focus on the patent in suit and the accused Balance Board.

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## 2. “Rotation” or “Parallel Movement” Limitation

Ithaca does not claim and has not claimed that Nintendo’s Balance Board “rotates.” The Balance Board does, however, fulfill the “parallel movement” limitation. Claim 1 requires that the support surface be mounted such that it *can* move in a direction which is parallel to, *inter alia*, a vertically oriented axis. This refers to what the inventors described as “movement of the entire platform downward or upward.” Parallel movement is distinguishable from tilting, but they need not be mutually exclusive. Nintendo incorrectly contends that the prosecution history “shows the up and down [movement] is equal across the surface.” Although the claim requires that this equal movement be possible, it need not occur in practice. This is because both tilting and parallel movement can occur at the same time. For example, the two right corners of the support surface may move down 1 unit, while the two left corners move down 2 units. In this scenario, the whole board has moved down 1 unit, and is also tilted to the left. The specification explains that this functionality is useful to detect, for example, a jumping movement—i.e., the support surface would need to be depressed during the operation of the device:

It remains to be added that the springs 132d are compressed slightly when the tubular section 128 is standing on the annular projection 130a in order, if the user jumps and the pivot pin 122 and the protective housing 186 consequently move upwards under the action of the pressure hoses 40, to be able to move the mobile plate 132b away from the stationary plate 132a to detect the jumping movement of the user.

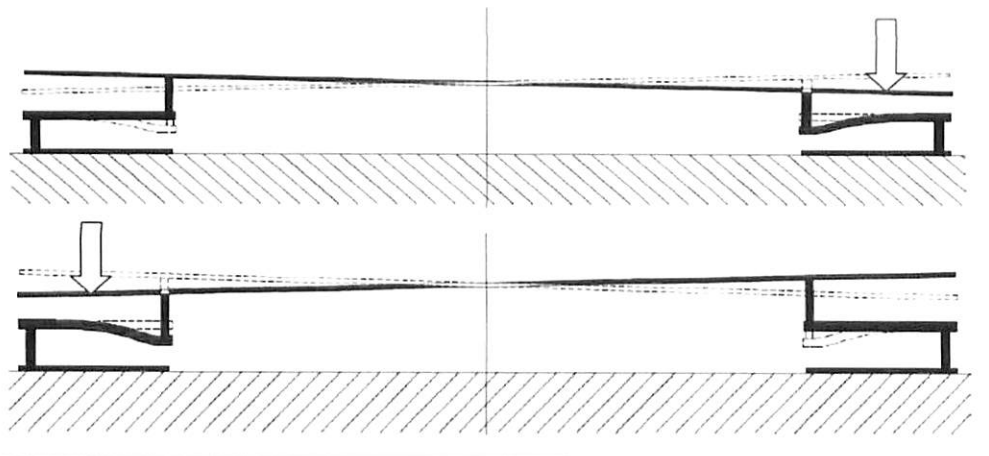
('802 patent, col. 11:58-65)

## 3. The Balance Board Satisfies the “Tilt” and “Parallel Movement” Limitations

Nintendo contends that “an unmoving, horizontal surface” does not meet the “tilt” limitation. The Wii Balance Board is not an unmoving surface. The “S-shaped load cells” attached in each of the four legs of the Balance Board allow the support surface to move and tilt, so that a user’s movement can be detected. Below is a diagram illustrating the operation of a platform mounted on strain gauges:



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The bending of the strain gauges is used to detect the distribution of weight on the Balance Board, and causes the support surface to move and tilt. This bending is measurable; whether or not it is visible is inapposite.

Ithaca has conducted testing to confirm that the balance board tilts. Weight was placed on top of the Balance Board, and incrementally redistributed. Each time the weight was redistributed, the displacement of each corner of the board was measured. Below are pictures of a portion of the testing procedure, and a summary of the results:

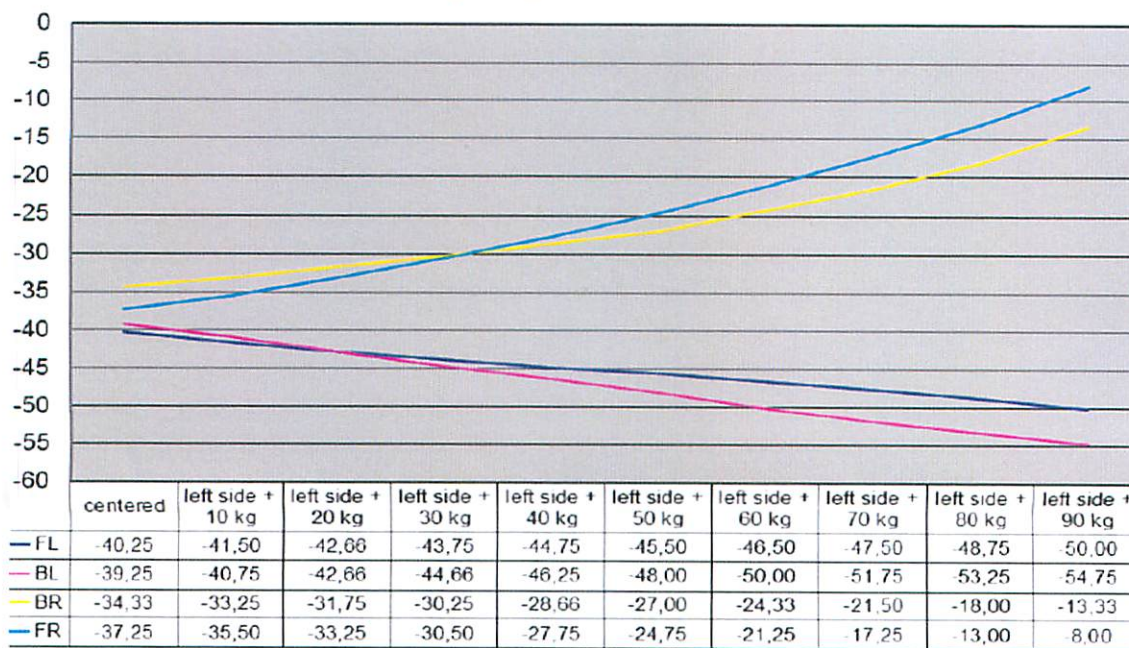
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**Vertical Height of Measuring Plate -  
Shifting Weight to Left Side**



The results demonstrate that each of the board's corners can move independently, allowing the board to both tilt and move vertically. Indeed, if the Balance Board was "an unmoving, horizontal surface," as Nintendo asserts, there would be no mechanism by which the Board could detect a user's movements. The bending of the load cells results in "tilting" and "parallel movement" within the meaning of Claim 1, and no reasonable argument can be made to the contrary.



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Nintendo's Balance Board includes all the limitations of Claim 1 of the '802 patent and our clients' allegations are supported by ample evidence. Frankly, I am disappointed that you and your client determined that your letter was an appropriate strategy. It was not. We have been told that sending a Rule 11 letter has become part of your firm's standard practice for infringement cases. If this is true, it is troubling and something that will be explored if you proceed. Should you follow through on your threat to pursue this meritless motion, it will only serve to increase your clients' costs and delay the ultimate resolution of this matter. We will, of course, seek appropriate remedies for having to incur this cost. I urge you to reconsider this strategy and instead devote your clients' resources to obtaining a prompt adjudication on the merits.

Very truly yours,

LINER GRODE STEIN YANKELEVITZ  
SUNSHINE REGENSTREIF & TAYLOR LLP



Ted S. Ward

TSW:yf

cc: Kenneth L. Dorsney, Esq.

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bcc: Mitch Kline, Esq.  
Jennifer Watkins, Esq.

# Exhibit 7

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# RANDOM HOUSE WEBSTER'S UNABRIDGED DICTIONARY

Second Edition

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NEW YORK

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**tigerish** (ti'gər ish), *adj.* 1. tigerlike, as in strength, fierceness, courage, or coloration. 2. fiercely cruel; bloodthirsty; relentless. Also, **tigriish**. [1565-75; TIGER + -ish] —**ti'gər-ish-ly**, *adv.* —**ti'gər-ish-ness**, *n.*

**tiger lil'y**, *n.* 1. a lily, *Lilium lancifolium* (or *tigrinum*), having dull-orange flowers spotted with black and small bulbs or bulbils in the axils of the leaves. 2. any lily, esp. *L. pardalinum*, of similar coloration. [1815-25]

**tiger lizard**, *n.* either of two lacertid lizards, *Nucras laticauda* and *N. tessellata*, of southern Africa, having a gray or brown body marked with black spots and bars.

**tiger mosquito**, *n.* a large Asian mosquito, *Aedes albopictus*, introduced into the southern U.S., that is a vector of dengue and other infectious diseases. [1825-35]

**tiger moth**, *n.* any of numerous moths of the family Arctiidae, many of which have conspicuously striped or spotted wings. [1810-20]

**tiger salamander**, *n.* a salamander, *Ambystoma tigrinum*, common in North America, having a dark body marked with yellowish spots or bars. See *illus.* under **salamander**. [1905-10, Amer.]

**tiger's-eye** (ti'gəz i'), *n.* 1. a golden-brown chatoyant stone used for ornament, formed by the alteration of crocidolite, and consisting essentially of quartz colored by iron oxide. 2. a glass coating or glaze giving the covered object the appearance of this stone. Also, **tigerseye**. [1890-95]

**tiger shark**, *n.* a large shark, *Galeocerdo cuvieri*, inhabiting warm seas, noted for its voracious habits. [1775-85]

**tiger snake**, *n.* either of two highly venomous snakes, *Notechis scutatus* and *N. ater*, of Australia and Tasmania, that grow to a length of 5 ft. (1.5 m). [1870-75]

**tiger swallowtail**, *n.* a yellow swallowtail butterfly, *Papilio glaucus*, of eastern North America, having the forewings striped with black. See *illus.* under **swallowtail**. [1885-90]

**tight** (tit), *adj.* —**er**, —**est**, *adv.* —**er**, —**est**, *adj.* 1. firmly or closely fixed in place; not easily moved; secure: a **tight knot**. 2. drawn or stretched so as to be tense; taut. 3. affording little or no extra room; fitting closely, esp. too closely: a **tight collar**. 4. difficult to deal with or manage: to be in a **tight situation**. 5. of such close or compact texture, or fitted together so closely, as to be impervious to water, air, steam, etc.: a good, **tight roof**. 6. concise; terse: a **tight style of writing**. 7. firm; rigid: his **tight control of the company**. 8. carefully arranged or organized and full; affording little leeway; compact: a **tight schedule**. 9. nearly even; close: a **tight race**. 10. informal. a. close, as friends; familiar or intimate. b. united: The strikers are **tight in their refusal to accept the proposed contract**. 11. parsimonious; stingy. 12. Slang. drunk; tipsy. 13. characterized by scarcity or eager demand; costly; limited: restricted by scarcity **market; tight money**. 14. Journalism. (of a newspaper) having more news available than is required for or utilizable in a particular issue. 15. Baseball. inside (def. 30). 16. Scot. and North Eng. competent or skillful. 17. tidy. 18. neatly or well built or made. —**adv.** 19. in a tight manner; closely; firmly; securely; tensely: Shut the door **tight**. The shirt fit **tight across the shoulders**. 20. soundly or deeply: to sleep **tight**. 21. sit tight; to take no action. [1400-50; late ME, *sandhi* var. of ME *thight* dense, tight, *thight* < ON *thētt* (c. OE *thiht* firm, solid, D. *G. dicht* tight, close, dense)] —**tight'ly**, *adv.* —**tight'ness**, *n.* —**Syn.** 11. close, niggardly, mean, grasping, frugal, sparing.

**tight-assed** (tit'ast'), *adj.* Slang (vulgar). rigidly self-controlled, inhibited, or conservative in attitude. [1965-70]

**tighten** (tit'n), *v.t.*, *v.i.* to make or become tight or tighter. [1720-30; TIGHT + -EN] —**tight'en-er**, *n.* —**Syn.** secure, anchor, fasten.

**tight end**, *n.* Football. an offensive player positioned at one extremity of the line directly beside a tackle, used as both a blocker and a pass receiver. Cf. **split end**. [1960-65, Amer.]

**tight-fisted** (tit'fis'tid), *adj.* parsimonious; stingy; tight. [1835-45]

**tight-fitting** (tit'fit'ing), *adj.* (of a garment) fitting closely to the contours of the body: **tight-fitting pants**. [1840-50; TIGHT + FIT + -ING]

**tight-knit** (tit'nit'), *adj.* well-organized and integrated.

**tight-lipped** (tit'lip't'), *adj.* 1. speaking very little; stern; close-mouthed. 2. having the lips drawn tight. [1875-80]

**tight-mouthed** (tit'mouth'd', -mouth't'), *adj.* tight-spoken. [1925-30]

**tight-rope** (tit'rōp'), *n.*, *v.*, —**roped**, —**rop-ing**. —*n.* 1. a rope or wire cable, stretched tight, on which acrobats perform feats of balancing. —*v.i.* 2. to walk, move, or proceed on or as on a tightrope: He **tightropeed through enemy territory**. —*v.t.* 3. to make (one's way, course, etc.) on or as on a tightrope. [1795-1805; TIGHT + ROPE]

**tights** (tits), *n.* (used with a plural v.) 1. a skin-tight, one-piece garment for the lower part of the body and the legs, now often made of stretch fabric, originally worn by dancers, acrobats, gymnasts, etc., and later made for general wear for adults and children. 2. a leotard with gird, and, sometimes, feet. [1825-35; n. use of TIGHT; see **leotard**]

**shot** (shot'), *n.* Cinematog. a shot in which the camera appears to be very close to the subject, as in an extreme close-up.

**shot-wad** (tit'wod'), *n.* Informal. a close-fisted or stingy person. [1895-1900, Amer.; TIGHT + WAD']

**shot-wire** (tit'wi'r'), *n.* tightrope (def. 1). [1925-30; SHOT + WIRE]

**ti-lath-pile-ser I** (ti'lat'h pi lē'zar, -pi-), died 727 B.C., king of Assyria c1115-1102?



**Tiglath-pileser III**, died 727 B.C., king of Assyria 745-727.

**tig-lic** (ti'g'lik), *adj.* Chem. of or derived from tiglic acid. Also, **tig-lin-ic** (ti glin'ik). [1870-75; < NL *tig-l(ium)* croton-oil plant (said to be < Gk *til(os)* watery excrement + NL -ium -um) + -ic]

**tig-lic ac'id**, *Chem.* a slightly water-soluble, poisonous compound,  $C_{18}H_{34}O_2$ , derived from croton oil and occurring as a thick, syrupy liquid or in colorless crystals. [1870-75]

**tig-lon** (ti'g'lon), *n.* the offspring of a male tiger and a female lion. Also, **tig-gon** (ti'gan). Cf. **liger**. [1940-45; TIG(ER) + L(I)ON]

**Tigré** (tē grā'), *n.* 1. a Semitic language spoken in northern Ethiopia. 2. a member of a nomadic, Tigrinya-speaking people of northern Ethiopia. 3. a member of an agricultural, Tigré-speaking people of northern Ethiopia.

**tig-gress** (ti'grɪs), *n.* 1. a female tiger. 2. a woman resembling a tiger, as in fierceness or courage. [1605-15; earlier *tigrisse* < F; see TIGER, -ESS]

**Tigrin-ya** (ti grɪn'yə), *n.* a Semitic language spoken in northern Ethiopia.

**Tigris** (ti'grɪs), *n.* a river in SW Asia, flowing SE from SE Turkey through Iraq, joining the Euphrates to form the Shatt-al-Arab. 1150 mi. (1850 km) long.

**tigrish** (ti'grɪsh), *adj.* tigerish.

**Ti-hua** (Chin. dē'hwā'), *n.* Wade-Giles. Dihua. Also, **Older Spelling**, **Ti'hwā'**.

**Ti-jua-na** (tē'wā'nə; Sp. tē hwā'nā), *n.* a city in NW Mexico, on the Mexico-U.S. border. 335,100. Also, **Tia Juana**.

**Ti/jua'na tax'i**, *CB Slang*. any vehicle, esp. a police car, with flashing lights and bright markings.

**Ti-kal** (tē kāl'), *n.* an ancient Mayan city occupied c200 B.C. to A.D. 900, an important center of Mayan civilization, situated in Petén in the jungles of northern Guatemala and the site of significant archaeological discoveries in the late 1950's and early 1960's.

**tike** (tik), *n.* tyke.

**tiki** (tē'kē), *n.* 1. (cap.) (in Polynesian mythology) the first man on earth. 2. (in Polynesian cultures) a carved image, as of a god or ancestor, sometimes worn as a pendant around the neck. [1875-80; < Maori and Marquesan]

**til** (til, tel), *n.* the sesame plant. Also, **teel**. [1830-40; < Hindi]

**'til** (til), *prep.*, *conj.* till; until. [aph. var. of UNTIL] —**Usage**. See **til'**.

**til-ak** (til'æk), *n.*, *pl.* —**ak**, —**aks**, a distinctive spot of colored powder or paste worn on the forehead by Hindu men and women as a religious symbol. [< Skt *tilaka*]

**tila-pia** (tē lā'pē ə, -lā'), *n.* any freshwater cichlid of the genus *Tilapia*, of African waters: an important food fish. [< NL (1849); ulterior orig. uncert.]

**Til-burg** (til'bɜrg; Du. til'boerck), *n.* a city in the S Netherlands. 153,117.

**til-bur-y** (til'ber'ē, -bə rē), *n.*, *pl.* —**ries**, a light two-wheeled carriage without a top. [1790-1800; named after its inventor, a 19th-century English coach-builder]

**til-de** (til'dē), *n.* 1. a diacritic (˘) placed over an *n*, as in Spanish *mañana*, to indicate a palatal nasal sound or over a vowel, as in Portuguese *são*, to indicate nasalization. 2. See **swung dash**. 3. Math. a symbol (˘) indicating equivalency or similarity between two values. 4. Logic. a similar symbol indicating negation. [1860-65; < Sp < L *titulus* superscription. See **tilde**]

**Til-den** (til'dən), *n.* 1. Samuel Jones, 1814-86, U.S. statesman. 2. William Ta-tam, Jr. (tā'tam), 1893-1953, U.S. tennis player.

**Til-dy** (til'dē), *n.* Zol-tán (zōl'tán), 1889-1961, Hungarian statesman: premier 1945-46; president 1946-48.

**tile** (til), *n.*, *v.*, **tiled**, **til-ing**. —*n.* 1. a thin slab or bent piece of baked clay, sometimes painted or glazed, used for various purposes, as to form one of the units of a roof covering, floor, or revetment. 2. any of various similar slabs or pieces, as of linoleum, stone, rubber, or metal. 3. tiles collectively. 4. a pottery tube or pipe used for draining land. 5. Also called **hollow tile**, any of various hollow or cellular units of burnt clay or other materials, as gypsum or cinder concrete, for building walls, partitions, floors, and roofs, or for fireproofing steelwork or the like. 6. Informal. a stiff hat or high silk hat. —*v.t.* 7. to cover with or as with tiles. [bef. 900; ME; OE *tigle* (c. G *Ziegel*) < L *tégula*] —**tile'like'**, *adj.*

**tiled** (tild), *adj.* 1. covered or furnished with tiles. 2. barred to outsiders, as nonmembers of a lodge. [1400-50; late ME; see **tile**, -ED]

**tile' field**, *n.* a system of unconnected drain tiles distributing septic tank effluent over an absorption area or providing drainage in wet areas. [1880-85, in sense "ground where tiles are made"]

**tile-fish** (til'fish'), *n.*, *pl.* (esp. collectively) —**fish**, (esp. referring to two or more kinds or species) —**fish-es**. 1. a large, brilliantly colored food fish, *Lopholatilus chamaeleonticeps*, of deep waters of the Atlantic Ocean. 2. any of several related fishes of the family Branchiostegidae. [1880-85, Amer.; TILE + FISH]

**til-er** (ti'lər), *n.* 1. a person who lays tiles. 2. Also, **tyler**, the doorkeeper of a Masonic lodge. [1250-1300; ME; see **tile**, -ER]

**til-er-y** (ti'lə rē), *n.*, *pl.* —**er-ies**, a factory or kiln for making tiles. [1840-50; TILE + -ERY]

**til-i-a-ceous** (til'e ə'shəs), *adj.* belonging to the Tiliaceae, the linden family of plants. Cf. **linden family**. [1890-95; < NL *Tiliaceae* (Tili(a) a genus (L linden tree) + -aceae -ACEAE) + -OUS]

**til-ing** (ti'ling), *n.* 1. the operation of covering with tiles. 2. tiles collectively. 3. a tiled surface. 4. Math. a

two-dimensional pattern resembling a tiled surface. [1400-50; late ME *tylunge*. See **tile**, -ING]

**til'l** (til), *prep.* 1. up to the time of; until: to **fight till death**. 2. before (used in negative constructions): He **did not come till today**. 3. near or at a specified time: **till evening**. 4. Chiefly Midland, Southern, and Western U.S. before; to: *It's ten till four on my watch*. 5. Scot. and North Eng. a. to. b. unto. —*conj.* 6. to the time that or when; until. 7. before (used in negative constructions). [bef. 900; ME; OE (north) *til* < ON *til* to, akin to OE *til* station, G *Ziel* goal. See **tille'**]

—**Usage**. **TILL** and **UNTIL** are both old in the language and are interchangeable as both prepositions and conjunctions: *It rained till (or until) nearly midnight*. The *savannah remained brown and lifeless until (or till) the rains began*. **TILL** is not a shortened form of **UNTIL** and is not spelled **TILL**. **TIL** is usually considered a spelling error, though widely used in advertising: *Open 'til ten*.

**til'l** (til), *v.t.* 1. to labor, as by plowing or harrowing, upon (land) for the raising of crops; cultivate. 2. to plow. —*v.i.* 3. to cultivate the soil. [bef. 900; ME *tilen*, OE *tilian* to strive after, get, till; c. D *tehlen* to breed, cultivate, G *zielen* to aim at]

**til'l** (til), *n.* 1. a drawer, box, or the like, as in a shop or bank, in which money is kept. 2. a drawer, tray, or the like, as in a cabinet or chest, for keeping valuables. 3. an arrangement of drawers or pigeonholes, as on a desk top. [1425-75; late ME *tylle*, n. use of *tylle* to draw, OE -*tyllan* (in *fortyllan* to seduce); akin to L *dolus* trick, Gk *dólos* bait (for fish), any cunning contrivance, treachery]

**til'l** (til), *n.* 1. Geol. glacial drift consisting of an unsorted mixture of clay, sand, gravel, and boulders. 2. a stiff clay. [1665-75; orig. uncert.]

**til-lable** (til'ə bəl), *adj.* able to be tilled; arable. [1565-75; TILL + -ABLE]

**til-lage** (til'ij), *n.* 1. the operation, practice, or art of tilling land. 2. tilled land. [1480-90; TILL + -AGE]

**til-lan-dia** (ti land'zē ə), *n.* any of numerous, chiefly epiphytic bromeliads of the genus *Tillandsia*, including Spanish moss and many species cultivated as ornamentals. [< NL (Linnaeus), after Elias *Tillands*, 17th-century Finno-Swedish botanist; see -IA]

**til-ler** (til'ər), *n.* 1. a person who tills; farmer. 2. a person or thing that tills; cultivator. [1200-50; ME *til-lier*. See **tille'**, -ER]

**til-ler** (til'ər), *n.* Naut. a bar or lever fitted to the head of a rudder, for turning the rudder in steering. [1375-1425; late ME < AF *teiler* weaver's beam; OF *teiler* < ML *tilarius*, equiv. to L *tēl(a)* warp + -arium -ARY] —**til-ler-less**, *adj.*

**til-ler** (til'ər), *n.* 1. a plant shoot that springs from the root or bottom of the original stalk. 2. a sapling. —*v.i.* 3. (of a plant) to put forth new shoots from the root or around the bottom of the original stalk. [bef. 1000; OE *telg* twig, shoot (not recorded in ME); akin to *telge* rod, ON *telga* branch, *telga* to cut]

**til-ler-man** (til'ər man), *n.*, *pl.* —**men**, a person who steers a boat or has charge of a tiller. [1930-35; **TILLER** + -MAN]

**Till Eu-len-spie-gel** (til' oi'lən shpē'gəl), a legendary German peasant of the 14th century whose practical jokes yielded many stories. Also, **Tyll Eulenspiegel**, **Tyl Eulenspiegel**.

**Til-lich** (til'ik; Ger. til'ikh), *n.* Paul Jo-han-nes (pōl yō han'is; Ger. pōul yō hā'nəs), 1886-1965, U.S. philosopher and theologian, born in Germany.

**til-lite** (til'it), *n.* a rock composed of consolidated till. [1915-20; TILL + -ITE]

**til'l mon'ey**, *Banking*. money set aside for use by a teller, as distinguished from money kept in the vault. [1890-95]

**Til-lot-son** (til'et sən), *n.* John, 1630-94, English clergyman: archbishop of Canterbury 1691-94.

**Til-ly** (til'y), *n.* 1. Count Jo-han Tser-claes von (yō'hān tser klās' fən), 1559-1632, German general in the Thirty Years' War. 2. Also, **Til'lie**, a female given name, form of **Matilda**.

**Til-sit** (til'zit, -sit), *n.* 1. former name of **Sovetsk**. 2. a semihard, light yellow cheese made from whole milk, similar in flavor to mild Limburger.

**tilt** (tilt), *v.t.* 1. to cause to lean, incline, slope, or slant. 2. to rush at or charge, as in a joust. 3. to hold poised for attack, as a lance. 4. to move (a camera) up or down on its vertical axis for photographing or televising a moving character, object, or the like. —*v.i.* 5. to move into or assume a sloping position or direction. 6. to strike, thrust, or charge with a lance or the like (usually fol. by *at*). 7. to engage in a joust, tournament, or similar contest. 8. (of a camera) to move on its vertical axis. The camera **tilts downward for an overhead shot**. 9. to incline in opinion, feeling, etc.; lean: *She's tilting toward the other candidate this year*. 10. **Tilt at windmills**, to contend against imaginary opponents or injustices. Also, **fight with windmills**. —*n.* 11. an act or instance of tilting. 12. the state of being tilted; a sloping position. 13. a slope. 14. a joust or any other contest. 15. a dispute; controversy. 16. a thrust of a weapon, as at a tilt or joust. 17. (in aerial photography) the angle formed by the direction of aim of a camera and a perpendicular to the surface of the earth. 18. (at) **full tilt**. See **full tilt**. [1300-50; ME *tylten* to upset, tumble < Scand; cf. dial. Norw *tylta* to tipple, *tylten* unsteady; akin to OE *tealt* unsteady, *tealtian* to totter, amble, MD *touteren* to sway] —**tilt'a-ble**, *adj.* —**tilt'er**, *n.*

**tilt'** (tilt'), *n.* 1. a cover of coarse cloth, canvas, etc., as for a wagon. 2. an awning. —*v.t.* 3. to furnish with a

CONCISE PRONUNCIATION KEY: act, cape, dare, part, set, equal; if, ice; ox, über, öder, oil, böse, böst, out, urge, child; sing, shoe; thin, that; zh as in treasure. a = a as in alone, e as in system, i as in easily, o as in gallop, u as in circus; \* as in fire (fīr), hour (ou'r). l and n can serve as syllabic consonants, as in cradle (krad'l), and button (but'n). See the full key inside the front cover.

# Exhibit 8



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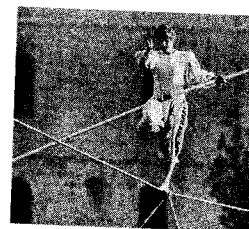
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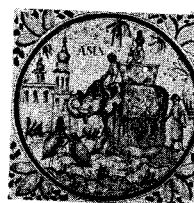
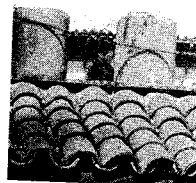
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tighten

Timbuktu



tightrope  
Philippe Petit at the  
Jerusalem Festival in 1987



tile  
Top: Roofing tiles arranged  
in the mission pattern  
Bottom: 18th-century  
Spanish tile  
representing Asia

ā pat	oi boy
ā pay	ou out
ār care	ōō tōōk
ā father	ōō boot
ē pet	ū cut
ē be	ūr urge
ī pit	th thin
ī pie	th this
īr pier	hw which
ō pot	zh vision
ō toe	ā about
ō paw	item

Stress marks:  
' (primary);  
' (secondary), as in  
dictionary (dīk'shā-nēr'ē)

oric or garment.  
nnected with another.  
etween extensions of a  
tion between systems.  
tions systems.

1 (tyān'). A mountain  
nd NW China rising to

anni Battista. 1696–  
nmand of perspective.  
placed one above an-  
tr.v. tiered, tier-ing.  
rise in tiers. [ME *tre*,  
t. See *TIRED*.]  
t. knots.  
third of the seven ca-  
use. 2. A measure of  
pe, or 42 gallons (159  
ards of the same suit.  
1 a parry or thrust can-  
al of a third. [ME <  
us. See *trei*.]

tyér'ra thēl (twē'gō-  
arated from the main-  
ain island, also called  
hile and Argentina.  
al shelflike tops, one

head, used to attach  
up or chain.  
zil flowing c. 805 km

ation, as of traffic.  
dweed.  
rty quarrel. — *intr.*:

transparent gauze of  
: Fr. *tiphane*, Epiph-  
EOPHANY.]  
3–1933. Amer. artist.  
lass.  
: of a kind popular in  
les.  
: midday; a luncheon

SSW of Toledo. Pop.

feline mammal (Pan-  
with transverse black  
felines, such as the  
rson regarded as ag-  
< OE *tigras*, tigers.  
rk., of Iran, orig. See

ly colored predatory  
y of warm sandy re-  
burrows.  
l felines, such as the  
nble tiger in ap-  
esp. a tabby, having

'garz-) n. A yellow-  
consisting of quartz  
acidolite.  
(*Lilium lancifolium*,  
e flowers.  
tly colored moths of  
triped wings.  
lamander (*Ambysto-*  
th America and har-

leocerdo *cuvieri*) of  
with vertical bars.  
il butterfly (*Papilio*  
tly yellow with nar-

d or fastened firmly  
y. 3. Of such close  
Leaving little empty  
tight weave. b. Af-  
reasoned or conscie-  
> close to the skin.  
re. 8. Constricted  
.a. Obtainable with-  
ected by scarves; a  
r get out of a tight  
in. 13. Closely con-  
l trim in appearance  
ol over elements of

ordinates; firm: tight management. 16. Slang. Intoxicated;  
17. Baseball. Inside. — *adv.* tighter, tightest. 1. Firm-  
2. Soundly: sleep tight. 3. Snugly or with con-  
shoes laced too tight. [ME, dense, of Scand. orig.]  
— *tight/ly* *adv.* — *tight/ness* *n.*

Syns: tight, taut, tense. The central meaning shared by  
these adjectives is "not slack or loose but pulled or drawn out  
a tight skirt; taut sails; tense piano strings.  
(tīt'ē) *tr.* & *intr.v.* -ened, -en-ing, -ens. To make or  
become tight or tighter. — *tight'en-er* *n.*

and n. Football. An offensive end who lines up close to a  
linebacker.

-fist-ed (tīt'fīs'tid) *adj.* Close-fisted; stingy. — *tight/-  
fist-ness* *n.*

-lipped also tight-lipped (tīt'lip't) *adj.* 1. Having the lips  
pressed together. 2. Loath to speak; close-mouthed.  
— *tight/lipped/ness* *n.*

-rope (tīt'rōp') *n.* 1. A tightly stretched rope or wire on  
which acrobats perform high above the ground. 2. An ex-  
tremely precarious course or situation.

(tīt's) *pl.n.* 1. A snug stretchable garment for the lower  
leg and the legs, generally worn by women and girls. 2. A  
garment, often full-length garment designed for athletic use,  
worn esp. by acrobats and dancers.

-wad (tīt'wōd') *n.* Slang. A miser.  
-lath-pl-le-ser III (tīg'lāth-pō-lē'zər, -pī-). d. 727 B.C.  
king of Assyria (745–727).

-tic acid (tīg'lik) *n.* A syrupy poisonous liquid, C<sub>5</sub>H<sub>8</sub>O<sub>2</sub>,  
derived from croton oil and used in making perfumes and  
dyeing agents. [NLat. *tiglium*, specific epithet of *Croton*  
*glabrum*, perh. < Gk. *tilos*, liquid feces (< the use of croton oil  
as a purgative).]

(tīg'glān) also ti-gon (gān) *n.* The hybrid offspring of a  
male tiger and a female lion. (tīg'gān) + t(i)gON.]

(tē-grā') *n.* A Semitic language of northern Ethiopia.  
-ness (tē'grīs) *n.* 1. A female tiger. 2. A woman regarded as  
being or fierce.

-nyā (tō-grēn'yā) *n.* A Semitic language of Ethiopia.  
-grīs (tē'grīs). A river rising in E Turkey and flowing c. 1,850  
mi (1,150 mi) through Iraq to the Euphrates R.

-na (tē'wā'nā, tē-hwā'nā). A city of extreme NW  
Mexico on the U.S. border S of San Diego. Pop. 429,500.  
-kal'āl). A ruined Mayan city of N Guatemala; the  
largest and possibly the oldest of the Mayan cities.

(tīk) *n.* Var. of *tyke*.  
-kē) *n., pl.* -kis. 1. Tiki. Myth. A male figure in Poly-  
nesian myth, sometimes identified as the first man. 2. A  
wooden or stone image of a Polynesian god. 3. A Maori fig-  
ure representing an ancestor. [Maori.]

(tīl) *n.* See *sesame*. [Hindi < Skt. *tilah*.]  
-pī-a (tā-lā'pē-ā, -lā'-) *n.* Any of various African cichlid  
fishes of the genus *Tilapia*. [NLat. *Tilapia*, genus name.]

-burg (tīl'būrg', -bœrk') *n.* A city of S Netherlands near the  
Belgian border SE of Rotterdam. Pop. 154,094.  
-y (tīl'bēr'ē, -bā-rē) *n., pl.* -ies. A light two-wheeled  
open carriage with two seats, used in the 19th century. [After  
timber, a 19th-cent. London coach builder.]

(tīl'dā) *n.* A diacritical mark (˘) placed over the letter n  
in Spanish to indicate the palatal nasal sound (ny), as in *ca-  
ñón*, or over a vowel in Portuguese to indicate nasalization, as  
in *lã, pão*. [Sp., alteration of obsolete Catalan *tile* < Lat.  
*tilulus*, superscription.]

(tīl'dān), Samuel Jones. 1814–86. Amer. politician  
who ran unsuccessfully for President in 1876.

(tīl) *n.* 1. A thin flat or convex slab of hard material, such  
as baked clay or plastic, laid in rows to cover walls, floors,  
and roofs. 2. A short length of pipe made of clay or concrete,  
used in sewers and drains. 3. A hollow fired clay or concrete  
block used for building walls. 4. Tiles considered as a group.  
& Games. A marked playing piece, as in mahjong. — *tr.v.*  
-ed, -ing, -es. To cover or provide with tiles. [ME < OE  
*tile* < Lat. *tegula* < *tegere*, to cover. See (s)teg-\*.]

(tīl'fīsh') *n., pl.* tilefish or -fish-es. A reddish-blue  
percid marine food fish (*Lopholatilus chamaeleonticeps*) of  
deep Atlantic waters having a fleshy flap on the nape and  
small yellow spots on the upper sides and fins. [Tile- (short  
for NLat. *Lopholatilus*, genus name: Gk. *lophos*, crest, fin +  
*tilus*, Latinized dim. of Gk. *latos*, a kind of perch) + -fish.]

(tīl'tār) *n.* 1. One who lays tiles. 2. The doorkeeper of a  
Masonic or other fraternal society's lodge.

(tīl'ling) *n.* 1. Tile laying. 2. Tiles. 3. A tiled surface.  
(tīl) *tr.v.* tiled, til-ing, tills. To prepare (land) for the  
sowing of crops, as by plowing and harrowing; cultivate. [ME  
< OE *tilian*.] — *til'able* *adj.*

(tīl) *prep.* Until. — *conj.* Until. [ME < OE *til* < ON.]

Usage Note: *Till* and *until* are generally interchangeable  
in both writing and speech, though as the first word in a  
sentence *until* is usually preferred. In the 18th century the  
word *till* became fashionable, as if *till* were a shortened  
form of *until*. Although *till* is now nonstandard, *till* is some-  
times used in this way and is considered acceptable.

till<sup>3</sup> (tīl) *n.* 1. A drawer, small chest, or compartment for mon-  
ey, as in a store. 2. A supply of money; a purse. [ME *tille*.]  
till<sup>4</sup> (tīl) *n.* Glacial drift made up of an unconsolidated mixture  
of clay, sand, pebbles, cobbles, and boulders. [?]

till-age (tīl'ij) *n.* 1. Cultivation of land. 2. Tilled land.  
til-land-si-a (tī-lānd'zē-ā) *n.* Any of various usu. epiphytic  
bromeliad plants of the genus *Tillandsia*, such as Spanish  
moss, of tropical and subtropical America. [NLat. *Tillandsia*,  
after Elias *Tillands* (1640–93), Finno-Swedish botanist.]

til-er<sup>1</sup> (tīl'ər) *n.* One that tills land: a tiller of soil.  
til-er<sup>2</sup> (tīl'ər) *n.* Naut. A lever used to turn a rudder and steer  
a boat. [ME *tiler*, stock of a crossbow < OFr. *telier* < Med.  
Lat. *tēlarium*, weaver's beam < Lat. *tēla*. See *teks*-\*.]

til-er<sup>3</sup> (tīl'ər) *n.* A shoot, esp. from the base of a grass.  
— *intr.v.* -lered, -ler-ing, -lers. To send forth shoots from the  
base. Used of a grass. [ME *\*tiller* < OE *telgor*.]

til-lich (tīl'ik, -ikh), Paul Johannes. 1886–1965. German-  
born Amer. theologian and philosopher.

til-ly (tīl'ē), Count of Johann Tserclaas. 1559–1632. Flemish  
field marshal during the Thirty Years' War.

tilt<sup>1</sup> (tīlt) *v.* tilt-ed, tilt-ing, tilts. — *tr.* 1. To cause to slope,  
as by raising one end; incline. 2.a. To aim or thrust (a lance)  
in a joust. b. To charge (an opponent); attack. 3. To forge  
with a tilt hammer. — *intr.* 1. To slope; incline. See *Syns* at  
slant. 2. To favor one side over another in a dispute; lean.

3.a. To fight with lances; joust. b. To engage in a combat or  
struggle; fight. — *n.* 1. The act of tilting or the condition of  
being tilted. 2.a. An inclination from the horizontal or verti-  
cal; a slant. b. A sloping surface, as of the ground. 3.a. A  
tendency to favor one side in a dispute. b. An implicit pref-  
erence; a bias. 4.a. A medieval sport in which two mounted  
knights with lances charged together and attempted to un-  
horse one another. b. A thrust or blow with a lance. 5. A  
combat, esp. a verbal one; a debate. 6. A tilt hammer. 7. *New*  
*England*. See *seesaw* 1. See *Regional Note* at *teeter-totter*.

— *idiom.* at full tilt. Informal. At full speed. [ME *tilten*,  
to cause to fall, perh. of Scand. orig.] — *tilt'er* *n.*

tilt<sup>2</sup> (tīlt) *n.* A canopy or an awning for a boat, wagon, or cart.  
— *tr.v.* tilt-ed, tilt-ing, tilts. To cover (a vehicle) with a tilt.  
[ME *telte*, tent < OE *teld*.]

tilth (tīlt) *n.* 1. Cultivation of land; tillage. 2. Tilled earth.  
[ME < OE < *tilian*, to labor.]

tilt hammer *n.* A heavy forge hammer having a pivoted lever  
by which it is tilted up and then allowed to drop.

tilt-ing board (tīl'ting) *n.* *New England*. See *seesaw* 1. See  
*Regional Note* at *teeter-totter*.

tilt-yard (tīlt'yārd') *n.* An enclosed yard for tilting contests.  
*Tim.* *abbr.* *Bible*. Timothy.

tim-bal also tym-bal (tīm'bāl) *n.* A kettledrum. [Fr. *timbale* <  
Ofr., alteration of *tamballe*, alteration of OSp. *atabal*, small  
drum < Ar. *at-tabl*, the drum.]

tim-bale (tīm'bāl, tīm-bāl', tām-) *n.* 1. A custardlike dish of  
cheese, chicken, fish, or vegetables baked in a drum-shaped  
pastry mold. 2. The pastry mold in which this food is baked.  
[Fr. *timbale*, mold. See *TIMBAL*.]

tim-ber (tīm'bər) *n.* 1.a. Trees or wooded land considered as  
a source of wood. b. Wood used as a building material; lum-  
ber. 2.a. A dressed piece of wood, esp. a beam in a structure.  
b. Naut. A rib in a ship's frame. 3. A person considered to  
have qualities suited for a particular activity. — *tr.v.* -bered,  
-ber-ing, -bers. To support or frame with timbers. [ME <  
OE, building, trees for building. See *dem*-\*.]

tim-bered (tīm'bərd) *adj.* 1. Covered with trees; wooded.  
2. Made of or framed by timbers, esp. exposed timbers.

tim-ber-head (tīm'bər'hēd') *n.* Naut. An upper end of a tim-  
ber that projects above a deck and is used as a bollard.

timber hitch *n.* A knot used for fastening a rope around a spar  
or log to be hoisted or towed.

tim-ber-ing (tīm'bər-ing) *n.* Timber or objects made of it.  
tim-ber-land (tīm'bər-lānd') *n.* Forested land, esp. land con-  
taining timber of commercial value.

tim-ber-line (tīm'bər-līn') *n.* 1. The elevation in a mountain-  
ous region above which trees do not grow. 2. The northern or  
southern latitude beyond which trees do not grow.

timber rattlesnake *n.* A venomous snake (*Crotalus horridus*  
subsp. *horridus*) of the United States having a yellowish-  
brown color and wide transverse bands on the back.

timber right *n.* A claim to the trees on property belonging to  
another. Often used in the plural.

timber wolf *n.* See *gray wolf*.  
tim-ber-work (tīm'bər-wŭrk') *n.* A structure made with tim-  
bers, as the framework of a boat or house.

tim-bre (tām'bər, tīm'-) *n.* 1. The quality of a sound that  
distinguishes it from other sounds of the same pitch and vol-  
ume. 2. Mus. The distinctive tone of an instrument or a sing-  
ing voice. [Fr. < OFr., drum, clapperless bell, prob. < Med.  
Gk. *\*timbanon*, drum < Gk. *timpanon*, kettledrum.]

tim-brel (tīm'brel) *n.* Mus. An ancient tambourinelike instru-  
ment. [Dim. of ME *timbre*, drum < OFr. See *TIMBRE*.]  
Tim-buk-tu (tīm'būk-tōō', tīm-būk'tōō'). A city of central  
Mali near the Niger R. NE of Bamako; founded in the 11th  
cent. Pop. 19,166.